

CLAIMS

What is claimed is:

1. A rotating tool comprising a body, a compression assembly, a hydraulic assembly, and
a lead screw:
 - 5 said compression assembly comprising a selectively compressible compression
element;

 said hydraulic assembly comprising a reservoir having an open end and a closed end,
said reservoir fillable with fluid and formed to receive a piston within said open end; and

 said piston being threadingly coupled with said lead screw and slidingly coupled with
10 said body such that movement of said piston towards said closed end causes rotation of
said piston that correspondingly produces rotation of said body.
 2. The rotating tool of claim 1, wherein potential energy is capable of being stored
within said compression element.
 3. The rotating tool of claim 1 where the fluid is disposed within said reservoir between
15 said piston and said closed end.
 4. The rotating tool of claim 1 wherein said hydraulic assembly is coaxial with said
compression assembly and is capable of selectively providing a reactive force to
maintain said compression element in a compressed state.
 5. The rotating tool of claim 4, wherein relieving the fluid from said reservoir removes
20 said reactive force and enables movement of said piston towards said closed end.
 6. The rotating tool of claim 1, wherein said compressive assembly further comprises a
rotor provided on the end of the compressive element distal from the hydraulic

assembly, and a thrust cup provided on the end of the compressive element proximate to the hydraulic assembly.

- 25 7. The rotating tool of claim 1, further comprising a collar coaxially connecting said hydraulic assembly to said compressive assembly.
8. The rotating tool of claim 1, wherein said compressive element is selected from the group consisting of a helical spring, at least one Bellville washer, a gas filled cylinder, and a coiled spring.
- 30 9. The rotating tool of claim 1, further comprising an orifice formed on said hydraulic assembly providing fluid communication between said reservoir and the outside of said hydraulic assembly.
10. The rotating tool of claim 5, further comprising a valve included with said orifice, said valve selectively providing fluid flow through said orifice.
- 35 11. The rotating tool of claim 1, further comprising an anchoring device capable of anchoring said rotating tool within a wellbore and stabilizing said lead screw during rotation of said body.
12. The rotating tool of claim 1, wherein said reservoir is comprised of an elongated annulus and said piston comprises an elongated tube formed for insertion into said elongated annulus.
- 40 13. The rotating tool of claim 1, wherein said body comprises a sleeve that encompasses a portion of said rotating tool.
14. The rotating tool of claim 1, further comprising a gyroscope operatively connected to said rotating tool.

- 45 15. The rotating tool of claim 1, further comprising a downhole tool operatively
connected to said rotating tool such that rotation of said rotating tool causes rotation
of the downhole tool.
16. A method of using the rotating tool of claim 1 comprising:
compressing said compression element;
50 sealing the fluid within said reservoir thereby providing a reactive force to maintain
said compression element in a compressed state; and
removing said reactive force from said compression element thereby allowing said
piston to be urged along the length of said lead screw towards said closed end of said
reservoir by the decompression of said compression element,
55 whereby the threaded coupling of said piston with said lead screw produces rotation of
said piston that in turn produces rotation of said body.
17. The method of claim 16, where the step of removing said reactive force from said
compression element is accomplished by metering the fluid out of said reservoir.
18. The method of claim 16 further comprising, disposing said rotating tool within a
60 wellbore.
19. The method of claim 18 further comprising anchoring said lead screw within the
wellbore.
20. The method of claim 18, further comprising adding a gyroscope to said rotating tool.
21. The method of claim 20 further comprising calibrating said rotating tool.
- 65 22. The method of claim 18 further comprising attaching a downhole tool to said rotating
tool.

23. The method of claim 22 further comprising azimuthally orienting the downhole tool by to a desired position by rotating said rotating tool a certain amount.